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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/750,300 | 12/31/2003 | Paul I. Nippes | 4623 105 US | 1679 |
| 26817 | 7590 | 07/13/2005 | EXAMINER | |
| MATHEWS, SHEPHERD, MCKAY, & BRUNEAU, P.A. 100 THANET CIRCLE, SUITE 306 PRINCETON, NJ 08540 | | | HUNNINGS, TRAVIS R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2632 | |

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,300

Applicant(s)

NIPPES, PAUL I.

Examiner

Travis R. Hunnings

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-27 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 21 is objected to because of the following informalities: the claim is missing from the specification. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.
3. Claims 1-27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,460,013 to Nippes. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

Regarding claim 1, Nippes' claims 1, 10 and 14 render the claim obvious because they contain all of the claimed limitations except for a monitoring device for monitoring real-time shaft grounding current values over time however Nippes device detects shaft grounding current and determines the rate of change in the shaft

grounding current over time which inherently has to monitor the values over time in order to determine the rate of change.

Nippes' claims 1, 10 and 14 do not specifically disclose the detector for determining the change in the shaft grounding current however it would have been obvious to include that determination in the system because the device already detects the shaft grounding current and its rate of change and the change of the shaft grounding current is simply the rate of change of the shaft grounding current at a particular instant in time. Nippes also uses the change in shaft grounding current as an input to the evaluation system for producing warnings so it would have to be detected at some point in the system.

Nippes' claims 1, 10 and 14 still do not specifically disclose the evaluation system for producing a warning as a function of the rate of change in the shaft grounding current however it would have been obvious to include that as a possible function to create a warning because Nippes uses the rate of change of the shaft voltage as an input to the evaluation system and it would only be beneficial to have more ways to determine if a problem is occurring. Nippes' claim 5 also discloses a method for producing a warning based on the rate of change of the shaft grounding current.

Regarding claims 2 and 9, Nippes' claims 1 and 10 render the claim obvious because they contain all of the claimed limitations. The claimed sampling for data

Art Unit: 2632

reduction is the same thing as compression because compression reduces the size of the data.

Regarding claims 3 and 10, Nippes' claim 10 renders the claim obvious because it contains all of the claimed limitations.

Regarding claim 4, Nippes' claim 14 renders the claim obvious because it contains all of the claimed limitations.

Regarding claims 5 and 11, Nippes' claims 2 and 11 render the claim obvious because they contain all of the claimed limitations.

Regarding claims 6 and 12, Nippes' claims 3 and 12 render the claim obvious because they contain all of the claimed limitations.

Regarding claims 7 and 13, Nippes' claims 4 and 13 render the claim obvious because they contain all of the claimed limitations.

Regarding claim 8, Nippes' claims 1, 10 and 14 render the claim obvious because they contain all of the claimed limitations except for a monitoring device for monitoring real-time shaft voltage values over time however Nippes device detects shaft voltage and determines the rate of change in the shaft grounding current over time

Art Unit: 2632

which inherently has to monitor the values over time in order to determine the rate of change.

Nippes' claims 1, 10 and 14 do not specifically disclose the detector for determining the change in the shaft voltage however it would have been obvious to include that determination in the system because the device already detects the shaft voltage and its rate of change and the change of the shaft grounding current is simply the rate of change of the shaft grounding current at a particular instant in time.

Nippes' claims 1, 10 and 14 still do not specifically disclose the evaluation system for producing a warning as a function of the change in the shaft voltage however it would have been obvious to include that as a possible function to create a warning because Nippes uses the change of the shaft grounding current as an input to the evaluation system and it would only be beneficial to have more ways to determine if a problem is occurring.

Regarding claim 14, Nippes' claims 5 and 15 render the claim obvious because they contain all of the claimed limitations except for monitoring real-time shaft grounding current values over time however Nippes device detects shaft grounding current and determines the rate of change in the shaft grounding current over time which inherently has to monitor the values over time in order to determine the rate of change.

Regarding claims 15 and 23, Nippes' claims 5 and 15 render the claim obvious because they contain all of the claimed limitations except for the sampling for data

Art Unit: 2632

reduction and compression over time. However, Nippes' claims 1 and 10 disclose a device that uses sampling for compression of sampled values which would lead to data reduction and therefore it would have been obvious to compress the data sampled through this method.

Regarding claims 16 and 24, Nippes' claims 5 and 15 render the claim obvious because they contain all of the claimed limitations. It would have been obvious that an electric motor is included in the claimed 'rotating machinery'.

Regarding claim 17, Nippes' claim 15 renders the claim obvious because it contains all of the claimed limitations.

Regarding claim 18, Nippes' claim 6 renders the claim obvious because it contains all of the claimed limitations.

Regarding claims 19 and 26, Nippes' claim 8 renders the claim obvious because it contains all of the claimed limitations.

Regarding claims 20 and 27, Nippes' claim 9 renders the claim obvious because it contains all of the claimed limitations.

Regarding claim 22, Nippes' claims 5 and 15 render the claim obvious because they contain all of the claimed limitations except for monitoring real-time shaft voltage values over time however Nippes device detects shaft voltage and determines the rate of change in the shaft grounding current over time which inherently has to monitor the values over time in order to determine the rate of change.

Nippes' claims 5 and 15 still do not specifically disclose the evaluation system for producing a warning as a function of the change in the shaft voltage however it would have been obvious to include that as a possible function to create a warning because Nippes uses the change of the shaft grounding current as an input to the evaluation system and it would only be beneficial to have more ways to determine if a problem is occurring.

Regarding claim 25, Nippes' claim 7 renders the claim obvious because it contains all of the claimed limitations.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Piety et al. *System And Method For Measuring And Analyzing Electrical Signals On The Shaft Of A Machine*, US patent 6,091,236;

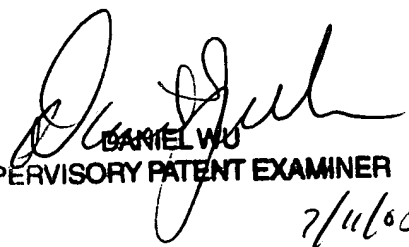
Dowling et al. *Motor Condition And Performance Analyzer*, US Patent 6,144,924.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRH


DANIEL WU
SUPERVISORY PATENT EXAMINER
7/11/05